# Authorship and Co-authorship in science and research

### **Ethical aspects**

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## Publications: role and function

- Report results
- Contribute to the process of science, research and development
- Contribute to the production of extraordinary knowledge
- Merit the researcher: promote career
- Means to acquiring funds
- That is: the publication is both a tool of science and research, and a "currency" in the instituional economy and politics of science and research

## Misconduct

- Fraud and deceit
- Stealing text (e.g. from student essays)
- Ghostwriting
- Unwarranted co-authorship
- Impeding warranted co-authorship
- Exagerrated co-authorship

- Only no. 1 *directly* opposes the aim of science and research
- The rest are opposed to the function of authorship and publication as a "currency"
- But flawed allocation of this currency may indirectly boost the wrong careers, allocate funds to the wrong people, and thereby impede science and research

## Absurdly long author lists

### 972

### The New England Journal of Medicine

Number 1

The ATLAS Collaboration

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AN INTERNATIONAL RANDOMIZED TRIAL COMPARING FOUR THROMBOLYTIC STRATEGIES FOR ACUTE MYOCARDIAL INFARCTION

THE GUSTO INVESTIGATORS\*

even more aggressive strategies to promote carlier and complete caronary reperfusion will further improve these outcomes.	Rosenblat, G. Thomas, J. Smith, W. Ellison, W. Levy, M. Glover, D. Eich, P. Fopper, K. Gibbs, R. Seagle, G. Lane, K. Pupin, A. Bialare, A. Twy, D. McMillan, R. Viceri, A. Winkaler, D. Makanoff, S. Rarri, D. Be, A. Ghalwamani, C. Davengeri, J. Horketer, D. Giveran, R. Dauelfeber, R. Schwiefer, M. Clark, F. Lezz, M. Whi-
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THE CERN LARGE HADRON COLLIDER: ACCELERATOR AND EXPERIMENTS

### The ATLAS Experiment at the CERN Large Hadron Collider

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### An Overview of the BlueGene/L Supercomputer

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Adiga, N. R., et al. (2002). An overview of the BlueGene/L Supercomputer. In Proceedings of the 2002 ACM/IEEE Conference on Supercomputing, November 16–22, 2002, 1–22.

### Who should be co-author and who shouldn't



Fig. 2 Trends in single and multiple authorship in computer science papers (data gathered from *DBLP Computer Science Bibliography*)





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ORIGINAL PAPER

Programmers, Professors, and Parasites: Credit and Co-Authorship in Computer Science

Justin Solomon

## "vancouver principles" in Biomedicine



- Authorship credit should be based on 1) substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Authors should meet conditions 1, 2, and 3.
- When a large, multicenter group [...], the group should identify the individuals who accept **direct** responsibility for the manuscript. These individuals should fully meet the criteria for authorship/ contributorship defined above [...] Journals [...] list other members [...] in the Acknowledgments.
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- Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content.

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### Unwarranted (parasitical) authorsip

- Unit- or department-leader
- Whoever is fixing rthe funds
- Person of strategic interest to please (vanity authorship)
- Supervisor or other senior on whom a student/ PhD candidate/young researcher depends

## Impeding warranted authorship

- Students
- PhD candidates
- Young researchers
- Highly dependent researchers (temporary appointments, lack of funds, etc.)

### Recommendation

- Make as clear and specific agreements as possible before you initiuate a research collaboration. With new partners, these should be in writing!
- Mind your honour and long-term reputation!
- Falsely ascertaining warranted authorship to a journal/conference is fraud
- Accepting invitations to unwarranted co-authorship makes you at risk for having to answer for misconduct and deceit of others
- More and more journals apply principle of each author ascertaining their own contribution try to go for these!